How-to lock the Ethernet Interface to 100mbit/full duplex on a Fuel

Published 07/15/2002

Symptom(s):

How-to lock the Ethernet Interface to 100mbit/full duplex on a Fuel

Fact(s):

IRIX 6.5.X
Silicon Graphics Fuel
SGI Origin 300 Series
Ethernet
Ethernet autonegotiation
Full Duplex Ethernet

SGI Solution:

In order to lock down the Ethernet interface on a Silicon Graphics Fuel workstation or
Silicon Graphics Origin 300 Server to 100mb/Full Duplex, the file
/var/sysgen/master.d/if_ef should be edited.

According to bug 852796, there is no documentation as to the chipset used for the
Ethernet interface for either the Fuel or Origin 300:

```
#define PHY_ICS1890             0x0015F42       /* Octane */
#define PHY_DP83840             0x20005C0       /* Origin 200/2000 and Onyx2 */
#define PHY_DP83843             0x20005C1       /* Origin/Onyx 3000 */
```

The chipset used is the same as that used in the Origin 3000 PHY_DP83843.
Thus the correct entry to local ef0 down to 100mbit/Full-Duplex should be:

```
{ -1, PHY_DP83843, -1, 0, 0xffff, F100 }
```

Rebuild the kernel with the autoconfig -f command, then reboot the system.
After the system comes back up, you can check the speed / duplex mode of the interface
by entering:

```
ifconfig -v ef0
```

For full details on disabling autonegotiation and locking the speed and duplex reference:
Disable autonegotiation for "ef" interfaces on IRIX 6.5.9 and above

Additional Details

Creation Date	06/25/2002 03:22 AM
Last modification	10/01/2015 02:20 AM
Published Date	07/15/2002
Products	• Servers and Clusters • SGI Origin/Onyx • Origin/Onyx Server • Software • Legacy Software • Operating Systems • IRIX • Peripherals • Networking • Ethernet NIC • Ethernet Switch • Switches and Cables • Workstations • SGI Tezro • O2 • Octane
Categories	• Knowledgebase • Technical Solution